3 Greek Biblical Majuscule

3.1 Overview of studies 1967–2000

Guglielmo Cavallo's monograph, *Le Ricerche sulla maiuscola biblica*, was for a long time a unique contribution to the field of Greek palaeography in terms of its methodology of applied palaeographical analysis.[125] Nevertheless, various critical observations from a number of scholars were made when the book was first published. In their reviews of the book, José O'Callaghan, Peter J. Parsons, Jean Irigoin and Nigel G. Wilson[126] raised a series of problematical issues which can be summarised as follows:[127]

1. the author's method of palaeographical comparison is carried out too strictly, resulting in over-precise datings (Parsons, Irigoin);
2. the choice of excluding bibliological and codicological data from consideration alongside palaeographical data (Irigoin, Wilson);
3. the exclusion of certain manuscripts from the analysis (O'Callaghan, Irigoin);
4. a historically linear and evolutionist vision of the history of writing (Parson, Irigoin, Wilson);
5. a somewhat unconvincing distinction between different areas of production (Irigoin, Wilson).

Specific answers to some of these criticisms can be found in Cavallo's book itself. Before the *Ricerche* the method of palaeographical comparison in the field of Greek palaeography was dominated—in Pratesi's words[128]—by 'the suggestion of greater or lesser formal beauty' in the scripts: in analysing these, attention was largely dedicated to the overall appearance of the writing and the shapes of individual letters. Cavallo's method, on the other hand, takes into consideration the paradigmatic level of all the elements of palaeographical valuation (structure, module, *ductus*, writing angle) with the aim of reducing (perhaps excessively) arbitrariness in dating.

125 The first assessment of the degree of innovation which Cavallo's book brought to the field of Greek palaeography can be found in Alessandro Pratesi's *Preface* (Cavallo 1967a, VII–IX).

126 O'Callaghan 1968; Parsons 1970; Irigoin 1970; Wilson 1971a.

127 For other more descriptive and less critical reviews, see Calderini 1966; Bianchi Bandinelli / Carandini 1968; Petrucci 1968; Duplacy 1968; Martini 1968b; Samuel 1968; Hombert 1970, 189–191.

128 Pratesi 1967, IX.

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As for the exclusion of 'all' the then recorded examples of Biblical majuscule from his study, Cavallo makes it clear that this is a deliberate choice; in fact, Pratesi in his preface to the book points out that 'the quantity of material taken into consideration by the author is vast, even though—by necessity—it does not include every known example of Biblical majuscule'.[129] The surprise of certain scholars at omissions in Cavallo's treatment therefore seems somewhat exaggerated, especially in view of the fact that several manuscripts indicated as missing in Cavallo's work are not written in Biblical majuscule.[130]

There are three criticisms, however, which deserve closer consideration: Cavallo's linear and evolutionary vision of the history of writing, his decision to exclude bibliological data from his analysis and the criteria he uses to distinguish geographical areas of production.

The evolutionary and linear model applied to the history of Biblical majuscule—as with the other 'canonical' or 'normative' majuscules—was certainly not innovatory when Cavallo used it in 1967. Previous palaeographers had used this model in order to reconstruct—on the basis of the handful of key manuscripts which can be dated more or less with certitude—a diachronic sequence of characteristic elements, according to the principle of cyclical development. Such a model, taken from the analysis of the development of living organisms, generally implies three distinct phases of growth: the first is the formation of the 'canon', the second is one of structural consolidation and maturity, and the third represents decline. In this fashion the 'life-cycle' of a style of writing has been divided, based on the principle of recurring life-cycles, into infancy, adulthood and old age, which tend to coincide with the birth, maturity and decadence of the cultures which gave rise to these styles of writing and used them. The limitations of this model are evident: on the one hand, there is the evolutionary idea that writing styles always tend towards a greater complexity and artificiality from simple origins and on the other the presupposition that there is a single, linear and one-directional chronological development, an assumption which tends to overlook the synchronically occurring deployments of the script in different geographical contexts.[131]

Bibliological data were specifically excluded by Cavallo from his 1967 study on the grounds of his decision to devote his investigations purely to the graphic dimension of writing, but another monograph by the present author does cover

129 Pratesi 1967, IX.

130 O'Callaghan 1968; Irigoin 1970. For these manuscripts, see Orsini 2005a, 169 n. 15.

131 See for example the criticisms of Cavallo 1967a on this very question made by Parsons 1970, 379–380; Irigoin 1970, 73–74; Wilson 1971a, 239.

this aspect of Biblical majuscule,[132] looking at all the data—also for the manuscripts studied by Cavallo—relating to material composition, actual or reconstructed measurements, the size of the written space, the arrangement of the columns and the number of lines in each column or page.

As for distinguishing between geographical areas of production, the analysis of this question is more complex and we will return to it in a later section of this chapter.[133]

Moving on from the reviews of Cavallo's 1967 study to an overview of the research on Biblical majuscule which has been done since it was published (much of it carried out by Cavallo himself), two main elements emerge:

1. the criticism raised by Parsons, Irigoin and Wilson of the historical overview of the Biblical majuscule canon in the *Ricerche* has not in fact been taken up in any substantial way by subsequent scholars in the field;
2. in most of the work which has been published since 1967 the issue that has attracted most attention from scholars relates to the localisation of manuscripts and in particular the two spheres of production, Western and Eastern.[134]

3.2 The chronological distribution of the manuscripts

The corpus of manuscripts written in Biblical majuscule which the present writer compiled in 2005[135] enables us to make a series of assessments of the chronological distribution of this material. The peak of production is recorded in the fifth century (26.30%) (Table 6). From the second to the fifth centuries there is a steady increase in production (7.78% in the second century, 11.85% in the third, 14.81% in the fourth); after the fifth century there is a decline until the style disappears definitively over the course of the ninth–tenth centuries: from 14.81% in the sixth century there is a precipitous fall to 2.96% in the seventh. The eighth century sees a small increase (3.70%) over the preceding century, but the following centuries see an inexorable decline set in: 1.48% in the period between the eighth and the ninth centuries, 1.48% again in the ninth, 0.74% as the ninth moves into the tenth century.

132 Orsini 2005a, 215–259.

133 See paragraph 3.5.2 in this chapter.

134 On Western Europe, see Cavallo 1977a; Cavallo 1977b; Cavallo 1988; for the Eastern area (comprising the Syriac-Antiochian, Palestinian, Sinaitic, Constantinopolitan, Mesopotamian areas), see Crisci 1996, 173–182; Crisci 2000.

135 Orsini 2005a, 215–259.

On the basis of these figures the production of manuscripts in Biblical majuscule can be subdivided into at least three periods: 1. the period from the formation of the graphic structure of the style (second-third centuries) up until the fourth century; 2. the period from the fifth to the sixth century; 3. the period from the seventh to the tenth century. The first two periods see a steady increase in production; over the course of the second and third periods there is a sudden fall in production, amounting to approximately 44% (or 119 manuscripts). A possible explanation for this decline in production can perhaps be sought both in the general crisis which overtook the Empire between the second half of the sixth century and over the course of the seventh, with the consequent decline of the most important cultural centres of production, including therefore of manuscripts,[136] as well as the increasing competition faced by Biblical majuscule from other canonical majuscules, above all Alexandrian majuscule and sloping pointed majuscule .[137]

The fact that the highest concentration of manuscripts in Biblical majuscule—about 144 manuscripts, 53.33% of the total corpus—is found in the second half of the fourth century, throughout the fifth century and the first half of the sixth perhaps sheds light on one aspect of the history of writing. If we take into account the fact that the first clear modifications to the rules of the Biblical majuscule canon are found from the end of the fourth century onwards,[138] then it is possible to conjecture that the style began to offer greater freedom of execution[139] to practitioners at the moment of its maximum adoption. In other words, reasons of what might be called 'graphic economy' led to the lack of adherence to certain rules in the canon. Both the widespread practice of a script together with an increase in the number of people capable of writing lead to a reduction of canonical 'unity': as a result a freer, less controlled interpretation of the rules begins to emerge. The theory normally advanced as an overall explanation for the production of Biblical majuscule from the end of the fourth century to the ninth–tenth centuries—that

136 For a general overview of the history of the period see Ostrogorsky 1993, 59–125. For the impact and consequences on contemporary book production, see Cavallo 1986, 164; Crisci 2000. For the historical and cultural aspects, see Mango 1991b, 157–158; Cavallo 1995a, 13.

137 Crisci 2000, 17: 'the canonical scripts which were most frequently used [in the sixth-seventh and eighth centuries] are Alexandrian majuscule and sloping pointed majuscule, whereas examples of Biblical majuscule are rare and of upright pointed majuscule even more so [...]. If anything one finds, among manuscripts with religious texts, a noticeable use of informal scripts, based on majuscule but varying considerably in structure, with abundant cursive strokes and other forms derived from minuscule script, various types of which were by now widely used in documentary production'.

138 Cavallo 1967a, 4–12.

139 Cavallo 1967a, 69–107.

the style no longer responded to the needs of the time and therefore lost its contextual relevance[140]—is useful for understanding the period from the seventh to the tenth centuries, but is less helpful for the earlier phase between the end of the fourth and the first half of the sixth century. Cavallo writes that 'when a canon of writing starts to show signs of effort in the execution, that is a sign that it no longer matches the overall graphic climate, its influence is felt less and for that very reason it falls into decline'.[141] This interpretation fits perfectly the situation of Biblical majuscule between the seventh century and the ninth–tenth centuries, but when we try to apply it, in the light of the data we have just described, to the situation between the end of the fourth and the first half of the sixth centuries, certain phenomena remain unexplained. The infringements of the canon, the higher proportion of manuscripts being written in Biblical majuscule, the first stylistic differentiations—all found in the period between the end of the fourth and the first half of the sixth century—do not so much indicate the 'decontextualisation' of Biblical majuscule as a canon as, rather, its 'contextualisation', that is to say, its transformation from a style inflexibly interpreted by a small number of scribes to one which is livelier since it is now open to individual ways of doing things and regional inflections, while still remaining clearly within an identifiable 'canon'.

Biblical majuscule was used for both scrolls and papyrus and parchment codices. Papyrus scrolls (Table 7) constitute 25.28% of production, papyrus codices (Table 8) 11.11%, and parchment codices (Table 9) 61.11%.[142]

Papyrus scrolls (Table 7) are found mostly in the second (29.41%) and third centuries (35.29%); in the fourth century there is an abrupt decline in numbers (8.82%). On the other hand, the fourth century sees a notable increase (33.33%) in the production of papyrus codices (Table 8). In this case manuscript production in Biblical majuscule reflects the growing prevalence, over the course of the second to fourth centuries, of the codex as opposed to the scroll; over this period the number of papyrus scrolls decreases and at the same time that of papyrus codices increases.

140 Cavallo 1977a, 97: 'Once the use of majuscule was limited or totally eliminated in the common writing practice, it could no longer renew itself but remained imprisoned within its canons'.

141 Cavallo 1967a, 69.

142 Five manuscripts (i.e. 1,85%: P. Bingen. 19 [LDAB 7999], P. Bour. 5 [LDAB 2188], P. Lit. Palau Rib. 20 [LDAB 5916], P. Oxy. IX 1179 [LDAB 265], P. Oxy. XI 1398 [LDAB 1963]) are written on papyrus, but whether they were originally intended as scrolls or codices remains undetermined; one manuscript (P. Genova 2 [LDAB 3272]) is formed of a single papyrus leaf; a single manuscript (Sin. MΓ 87 [LDAB 7334]) is a parchment scroll.

The production of parchment codices (Table 9) grows over the third and fourth centuries to reach a peak of 35.76% in the fifth century. After a phase when the various material types co-exist (in the third century there are twenty-four scrolls, four papyrus codices, one parchment codex; in the fourth century there are six scrolls, ten papyrus codices, and twenty-three parchment codices) in the fifth century parchment codices become the almost absolutely dominant form (one scroll, ten papyrus codices, fifty-nine parchment codices). After the fifth century, only parchment codices are known, with the highly sporadic exception of some papyrus codices (one in the sixth century, one in the sixth-seventh centuries).

As can be seen, the information from an analysis of the chronological distribution of the type of material support found in manuscripts written in Biblical majuscule does not add much which is new to our overall picture of the Greek world,[143] but it is still useful in helping us to measure with greater precision several phenomena which occur as part of the production of Biblical majuscule, such as, for example, the transition from the structural consolidation of the style (first half of fourth century) to the early stylistic deviations from the rules (between the end of the fourth century and the fifth century).

3.3 Material types of production

3.3.1 Papyrus scrolls

The papyrus scrolls for which it is possible to reconstruct with some degree of certainty the original dimensions (Table 10) are few in number and all of them contain literary texts (Demosthenes and Homer). For the other papyrus scrolls only fragments exist which do not allow us to formulate reliable conjectures of their original dimensions. In terms of length, their measurements vary from a

143 For an overview of the emergence and the development of the codex see Roberts / Skeat 1987, 35–83. For a revision of the datings proposed by them see Cavallo 1989, 171–173. See also Crisci 2003, 84–85, whose view–based on statistics of 1,550 Greek survivals from the third/fourth to the eighth century–is that the papyrus scroll gradually disappeared between the fourth and the sixth centuries, the papyrus as opposed to parchment codex was the dominant form until the end of the sixth century, while the parchment codex became dominant only from the beginning of the seventh century onwards.

maximum of [19/20.5] m—exceptionally long—to a minimum of [4] m;[144] their height varies from [26.6] cm to a minimum of [24] cm.[145]

3.3.2 Papyrus codices[146]

There is more data on the dimensions, actual or reconstructed, of papyrus and parchment codices and in consequence a more detailed analysis can be undertaken.[147]

For papyrus codices (Table 11), there is a noticeable preference for a small to average size (height + width):[148] 73.68% are in the range from 32 to 49 cm. A good number, 21%, also have a small size—i.e. below 32 cm. Very few have a size greater than 49 cm: just 5.26%. No papyrus codex has a size greater than 67 cm.[149]

The relationship between page width and height in papyrus codices (Table 12) confirms some general tendencies: the most frequently occurring ratios are found in the range between 0.551 and 0.650 (a total of eight manuscripts), while 16.68% have a ratio between 0.751 and 0.800. These figures indicate that papyrus codices in Biblical majuscule reflect the norms of production of Greek papyrus codices:[150] in the majority of cases, narrow proportions (below 0.650) for the pages are preferred. The explanation for this preference undoubtedly lies in the methods of production of these codices, beginning with the commercial papyrus scrolls with close-set *kolleseis*.[151]

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144 For the length of papyrus scrolls, see Johnson 2004, 143–152.

145 For the height of papyrus scrolls, see Johnson 2004, 141–143.

146 The analysis of the external aspects of the manuscripts (as codices, both on papyrus and on parchment) follows the methodology established in Bozzolo / Ornato 1980. See also the contributions on methodology collected in Ornato 1997 (Bozzolo / Ornato 1997a; Bozzolo / Ornato 1997b; Maniaci / Ornato 1997]) and the monograph volume Maniaci 2002.

147 In Tables 11–18, the dimensions used to calculate the size and the proportion of width to height of the page (W/H) and of the written space (w/h) always correspond to the original dimensions of the manuscript leaves, actual or reconstructed, and never from surviving fragments.

148 For the typology of different sizes, see Bozzolo / Ornato 1980, 217–220 (small size up to 32 cm; small-medium size 32–49 cm; large size over 49 cm); a slightly different typology is found in Maniaci 2002, 85 (small size up to 25 cm; medium size 25–50 cm; large size over 50 cm).

149 Maniaci 2002, 75–106.

150 Menci 1997, 685; Maniaci 2002, 132–133; both these contributions made use of data supplied by Turner 1977.

151 Turner 1977, 43–53; Menci 1997, 685–689; Maniaci 2002, 132–133.

The ratio w/h of the written space (Table 13) in papyrus codices appears to follow the same tendency in the ratio W/H of the page. The majority of manuscripts, about eleven, have a ratio lower than 0.800, of which six have a ratio lower than 0.650. Only a single manuscript has a ratio equal to 1. The written space in papyrus codices tends to be narrow, like the page.[152]

3.3.3 Parchment codices

Codicological data which is useful for an analysis of their material aspects can be found only in 135 parchment codices (Table 14). Small to average dimensions are most common (42.96%) but there is a sizeable number of small dimensions (28.15%) and average to large dimensions (27.41%). Only two manuscripts are large. A comparison of this data with that for papyrus codices shows that in both types small to average dimensions are most common. Yet there is one difference which is worth noting: among papyrus codices there are very few average to large size codices and none of large dimension; among parchment codices, on the other hand, the proportion of codices of average to large dimensions is quite high and there are also codices of large dimension, although only 1.48% of the total.[153]

When we analyse the chronological distribution for the size of parchment codices, it can be observed that small to average dimensions are most numerous in the fifth century (twenty-one manuscripts), like those with small dimensions (eighteen manuscripts). In contrast, average to large dimensions are more common in the sixth century (nineteen manuscripts) than in the preceding or following centuries. It would seem almost that small and small to average sizes, most commonly found in the fourth and fifth centuries, gradually make way in the sixth century for average to large dimensions.[154]

As far as the ratio W/H of the pages in parchment codices is concerned (Table 17), the ratios most commonly found range between 0.651 to 0.900 (comprising a total of 108 manuscripts). Within this wide spectrum, the most frequent ratios are in the ranges 0.751–0.800 (twenty-six manuscripts) and 0.801–0.850

152 See Menci 1997, 687; Maniaci 2002, 157–158.

153 For an analysis of the two main 'recipes' for page layout in Greek and Latin manuscripts (Paris. lat. 11884, ff. 2–4, end of ninth century; Monac. Clm 7775, fifteenth century), see Maniaci 1995; Maniaci 2002, 177–208; for another 'recipe' of *mise en page* in Byzantine manuscripts (Vat. gr. 604, ff. 183r–187r, second half of the fourteenth century), see also Bianconi 2011. For the size of antique codices on parchment, see Maniaci 2002, 75–106.

154 Maniaci 2002, 80–82.

(twenty-eight manuscripts).[155] From this it is possible to deduce that in parchment codices, unlike papyrus codices, the proportions of the page tend on the whole to be square. This is a notable distinction between the two types of production, recorded by other scholars,[156] and now newly confirmed by the data on manuscripts written in Biblical majuscule.

Manuscripts with these ratios are most frequently found in the fifth and sixth centuries. However, it should be noted that while in the fifth century the ratios 0.751–0.800 and 0.801–0.850 are found in almost equal numbers (nine manuscripts for the former and eleven for the latter ratio), the second ratio is dominant in the sixth century, with eleven manuscripts as opposed to three.

Again there is a tendency to square proportions in the w/h ratio of the written space (Table 18). The most common ratios are 0.801–0.850 (eleven manuscripts or 14.86%) and 0.901–0.950 (ten manuscripts or 13.51%). The W/H ratio of the page and the w/h ratio of the written space in parchment codices both show a tendency towards square proportions.[157]

In analysing the chronological distribution for the data on the w/h ratio of the written space, certain significant features stand out. Above all, the ratios 0.801–0.850 and 0.901–0.950 are most commonly found in the period from the fourth to the sixth centuries. From the seventh to the ninth centuries by contrast the ratio 0.601–0.750 is more commonly found: of the twelve manuscripts from this period, no fewer than ten have the ratio 0.601–0750. Thus there is a transition from a phase (fourth to sixth centuries) in which the w/h ratio of the written space tends largely toward the square to a period (seventh to ninth centuries) in which it tends towards the rectangular (with the shorter side at the base). The phenomenon can be explained by the fact that, in comparison with previous centuries, the page proportions were also reduced.

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155 Maniaci 2002, 131–134; in connection with Byzantine manuscript production as contrasting with Latin practice, Maniaci (Maniaci 1995, 31; Maniaci 2002, 195–196) notes a 'clear preference for volumes of large proportion, as already demonstrated by Eric G. Turner's investigations of late-antique manuscripts on parchment. It should be noted, however, that many of the volumes studied by Turner show a high proportion of about 0,800, occasionally rising to 1, whereas the proportion of most of the Greek codices produced between the ninth and the twelfth centuries correspond to the 'Pythagorean' proportion of about 0,750 (equal to the mathematical ratio ¾), with only a small number of volumes' exceeding 0.800'.

156 Menci 1997, 685; Maniaci 2002, 131–132. See also Cavallo 1997, 211, who only takes into consideration late-antique manuscripts containing secular literature ('the scarcity of late-antique Greek manuscripts of classical authors which survive in libraries and the absence, once again, of Christian texts should make us cautious in drawing conclusions, but, as in Latin production, it would seem that the square or almost square format was dominant').

157 Menci 1997, 687; Maniaci 2002, 157–158.

3.4 Page layout

In terms of the number of columns on a page, in papyrus codices (Table 15) a page layout consisting of a single column to a page is the dominant pattern (76.93% as opposed to 23.07% of manuscripts with two columns to a page). This is by no means an innovation in manuscripts written in Biblical majuscule:[158] the phenomenon could be caused by the fact that papyrus codices prefer narrow page proportions. In parchment codices (Table 16) the situation is different: apart from a minority of manuscripts which have four and three columns to a page (0.65% and 4.54% respectively) 46.75% have two columns and 48.05% one column, thus with a very narrow difference in the prevalence of the two types.

3.5 Textual categories

The texts transcribed in Biblical majuscule belong to various genres. Comparing religious and secular literature (Table 19), it will be seen that in overall terms religious literature has the edge with 54.44% of texts as opposed to 43.70% of secular texts. Looking at the type of material support, there is a prevalence of secular literary texts on papyrus scrolls, few on papyrus codices, and in large number on parchment codices; religious literature is not much found on scrolls, but there are notable quantities both on papyrus and parchment codices. The trends over time of the two genres move in opposite directions: secular literature is written in large quantity on scrolls only to found increasingly less frequently on codices, whereas religious literature is insignificant in terms of scrolls but is massively represented in codex production.[159]

In terms of the quantities of religious and secular literature on papyrus scrolls (Table 20) the disproportionate superiority of secular over religious texts is quite clear, 95.59% as opposed to 2.94% This ratio is almost completely reversed when we look at papyrus codices (Table 21): here religious literature is dominant, 80% as opposed to 20% for secular literature. This remains almost

158 Maniaci 2002, 292–295.

159 Crisci 2003, 86–89. This phenomenon can be explained by the noted predilection on the part of Christians for the codex over the roll: on this topic, see the different opinions of Roberts / Skeat 1987, 35–74 van Haelst 1989; Cavallo 1989; Crisci 2008.

unchanged when we consider parchment codices (Table 22): 71.51% of religious literature against 26.06% of secular literature.[160]

These figures give rise to some interesting indications. Secular literature, prevalent on papyrus scrolls, is written in Biblical majuscule in large quantities until the fourth–fifth centuries but subsequently becomes increasingly rare; religious literature is transmitted almost exclusively in the form of the codex (both papyrus and parchment) and is written in Biblical majuscule in increasing quantities from the third century onwards.[161] The interesting aspect which seems to emerge from this is that Biblical majuscule was not adopted from its beginnings for religious texts but on the contrary in its initial phase (from the end of the second century to the fourth century) was used almost exclusively for secular literary texts.

So far we have been looking at types of text from a general viewpoint. It will be helpful to exemplify in summary form—and in chronological sequence—the relationship between different types of book production and types of texts.

Looking at the types of text found on papyrus scrolls (Table 23), we find that epic is the most frequent literary genre (25%), followed by oratory at 17.65%, and history at 16.18%. All three belong to secular literary production; sacred literature is present with the *Old Testament*, at 2.94%.

Turning to types of text on papyrus codices the situation is different (Table 24). Here the *New Testament* and *Old Testament* prevail, at 40% and 23.33% respectively. The secular literary genre most found remains the epic at 6.67%, despite the abrupt decline when this figure is compared to the high proportion found on papyrus scrolls. New genres, compared to the literary genres found on papyrus scrolls, are above all patristic literature (13.33%), manuals (3.33%) and prosody (3.33%).

The categories of text found in parchment codices (Table 25) confirm the data we have just seen: the *New Testament* is the most commonly found text (29.1%) followed by the *Old Testament* at 24.85%. According to the data presented here, and considering papyrus and parchment codices together, there are sixty manuscripts in Biblical majuscule of *New Testament* texts as opposed

160 Crisci 2003, 87; Crisci 2000, 16–17: 'from a sample of *c.*300 items [...] manuscripts of the *Old Testament* account for almost 30%; more than half of these (*c.*63%) contain the *Psalms*. Manuscripts of the *New Testament* represent little more than 23% of the sample'.

161 Crisci 2003, 104–106; more generally, see Crisci 2000, 7: 'on the basis of surviving evidence, the number of secular authors read and transcribed between the sixth-seventh and eighth centuries was extremely small and decreased even further with the passing of time'.

to forty-eight of *Old Testament* texts.[162] Liturgy and patristic texts account for 5.45% and 4.85% of production respectively. In secular literature, oratory is the most prominent genre (7.88%), followed by epic poetry at 5.45% and history at 3.03%: in all three categories of book production these are the three most commonly found genres in secular literature. The data for the fourth century is particularly striking: oratory is the largest category with seven manuscripts as opposed to six of the *New Testament*: this is further proof of the fact that Biblical majuscule emerges as a style of writing used in secular texts and over the course of the following centuries becomes especially associated with sacred texts. In the fourth century this transformation is still only in progress, in so far as the presence of oratory, among the literary genres, prevails over that of sacred texts. After the fourth century, this no longer occurs.

3.5.1 New guide-manuscripts for use in dating

With the updated information on papyri and parchment manuscripts written in Biblical majuscule it has become possible to identify new manuscripts which can be used as guides for dating diachronically the development of the Biblical majuscule style of writing. In his *Ricerche* Cavallo used the following manuscripts as guides for dating: P. Oxy. IV 661 (end of second century; LDAB 474), P. Ryl. I 16 (*c.*220–225 CE; LDAB 2661); Vindob. Med. gr. 1 (*ante* 512/513 CE; LDAB 10000);[163] Vat. gr. 1666 (800 CE; LDAB 7153). To these manuscripts new ones can now be added.

A single sheet, Sin. gr. NE ΜΓ 12 (Fig. 34),[164] is dated 861/862 and contains the subscription to Sin. gr. 210, written in sloping pointed majuscule. This is possibly the latest example of Biblical majuscule we have, though it is important to bear in mind that in this case the style is used for a particular purpose since it has been employed to write the subscription rather than the entire manuscript. Therefore, while Sin. gr. NE ΜΓ 12 is certainly another example of a dated manuscript written in Biblical majuscule, the last manuscript entirely written in the style remains Vat. gr. 1666 from 800.

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162 This data seem to contradict the general trend that instead shows a higher number of *Old Testament* rather than *New Testament* manuscripts. From a sample of about 300 manuscripts, Crisci 2000, 16, provides the following data: 30% for the *Old Testament* and 23% for the *New Testament*.

163 See in the present volume p. 148 and Fig. 57–59.

164 Harlfinger / Reinsch / Sonderkamp 1983, 13–14 and title page; see also Nikolopoulos 1999, 144 and pl. 2.

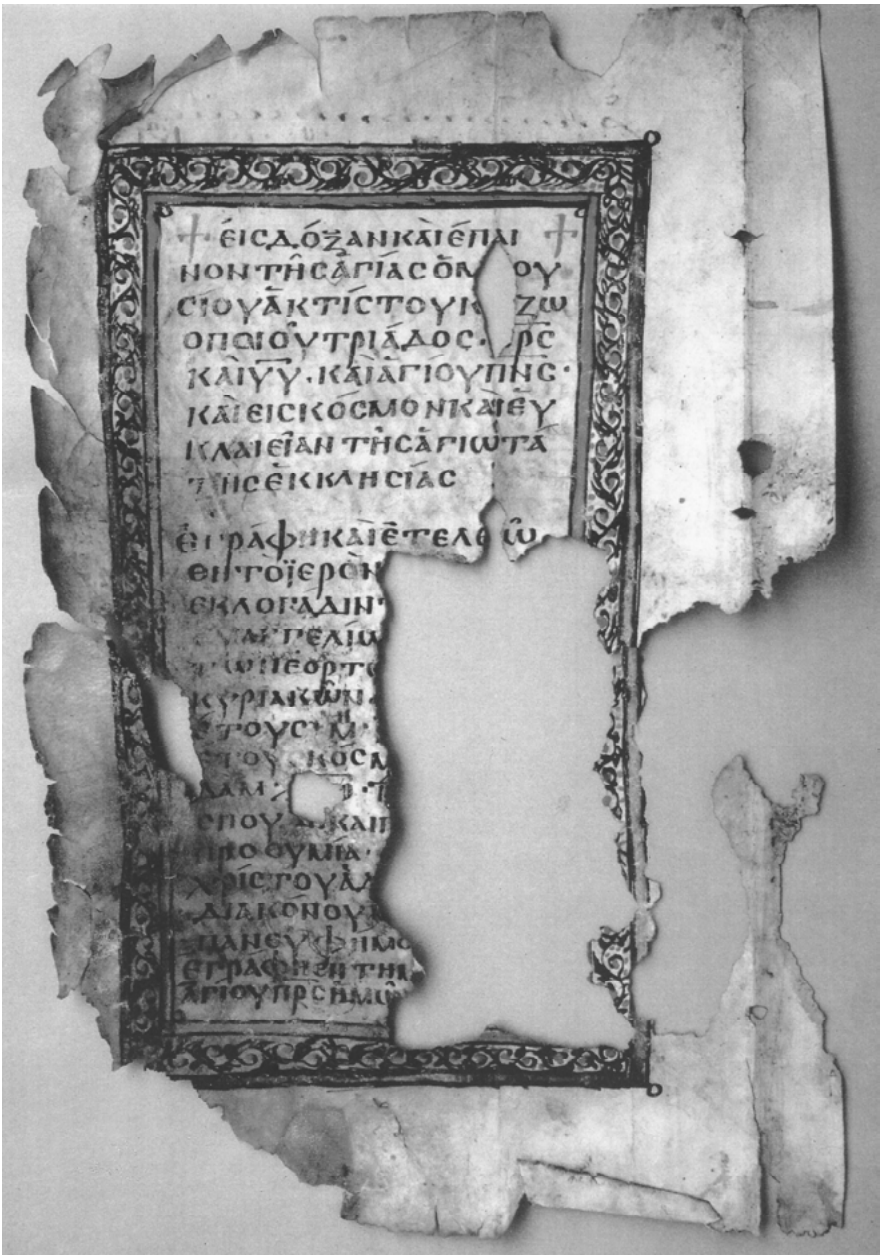

Fig. 34: Sin. gr. NE ΜΓ 12.

In four other cases, the dating of the manuscripts can be determined by other chronologically specific criteria, in addition to palaeographical comparison with other manuscripts in Biblical majuscule.[165]

The manuscript P. Berol. 13929 + P. Berol. 21105 (LDAB 367; Fig. 35), containing Aristophanes' *Equites*, has an extensive apparatus of marginal and interlinear notes written in a semi-cursive majuscule not later than the end of the fifth century. These notes of the scholiasts, contemporary with the text, provides more objective evidence for the dating of the manuscript based on a comparison with other dated manuscripts.

Fig. 35: P. Berol. 21105.

Another manuscript, P. Oxy. LXII 4327 (LDAB 734; Fig. 36), presents some interesting chronological clues. On the side of these two fragments from a papyrus scroll written across the fibres, there are traces of a document written in a cursive style datable to the third century. In this case, the scroll, containing the *De Chersoneso* by Demosthenes on the side written along the fibres, was re-used some decades later on the other side to write a document, which thus constitutes a *terminus ante quem*.

165 For detailed descriptions of the four manuscripts cited below, see Orsini 2005a, 51–52, 99–100, 101–102, 111–112.

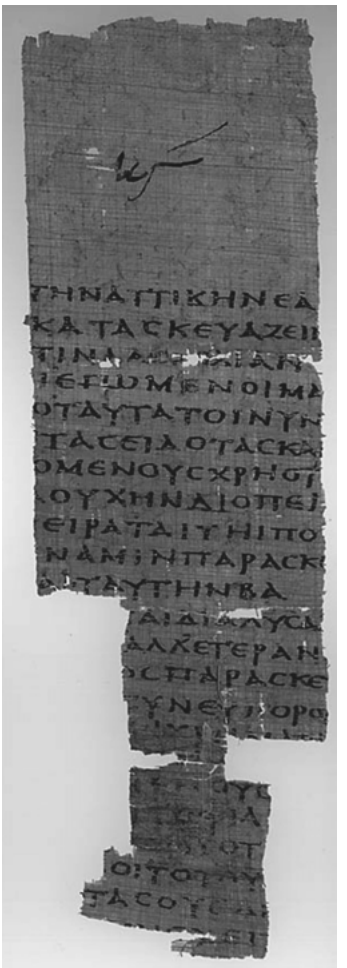

Fig. 36: P. Oxy. LXII 4327.

In the fragment P. Oxy. XLIX 3509 (LDAB 3823; Fig. 37), from a papyrus scroll, the side written across the fibres and the top and bottom margins of the side along the fibres have been used to record private accounts in a cursive script datable to the first half of the fourth century. So here is another example of a scroll, in this case with Plato's *Republic* on the side along the fibres, which was reused some decades afterwards in order to write a document using both the side across the fibres and the remaining spaces on the side along the fibres. Again the cursive script of the document constitutes a *terminus ante quem*.

Fig. 37 and 38: P. Oxy. XLIX 3509 and P. Oxy. XLV 3227.

The same phenomenon is found in P. Oxy. XLV 3227 (LDAB 1233; Fig. 38), two fragments from a papyrus scroll. On the side written across the fibres there are the remnants of two columns from a document written in a cursive style of the third century. The scroll, which contains Hesiod's *Works and Days* on the side written along the fibres, was subsequently reused in order to write a document on the other side. This document thus constitutes a *terminus ante quem*.

While these four manuscripts do not contain a specific dating *ad annum*, they nevertheless can be used as guide-manuscripts for dating, alongside those used by Cavallo in his 1967 study.

3.5.2 Geographical areas of production

For the aspect of the geographical areas of production the argument is more detailed and complex.

Summarising the various proposals for geographical distinctions which have been advanced from 1967 (Cavallo) to 1996 (Crisci) (Table 26), there are eleven distinct areas: 1. Constantinople and surroundings; 2. Syriac-Antiochene; 3. Mesopotamian; 4. Syrian-Mesopotamian; 5. Palestinian; 6. Syrian-Palestinian; 7. Egyptian-Nitrian; 8. Egyptian-Alexandrian; 9. Egyptian;[166] 10. Sinaitic; 11. Western. The main question which needs to be asked is whether all these areas correspond to more or less separate and unitary cultural ambiences in which manuscripts written in Biblical majuscule were produced.

3.5.2.1 Constantinople

The manuscripts Vindob. Med. gr. 1—the celebrated Dioscorides in Vienna—and Lond. Add. MS 5111 (LDAB 7151) were attributed by Cavallo to Constantinople and its ambience.[167] The writing shows ornamental thickening at the ends of thin strokes; oblique strokes descending from left to right are thickest (except for the oblique strokes of *nu* which are thread-like); the oblique strokes descending from right to left are very thin (except in *zeta*, where the stroke is heavy). The middle oblique strokes of *mu* are fused in a curve which dips below the base line; *phi* has a rounded bowl. Of all Cavallo's proposals for the place of production, this one, the keystone of which is the Vienna Dioscorides,[168] appears to be the most convincing. The following manuscripts have also subsequently been attributed to Constantinople: Marc. gr. I 8, Neapol. ex Vindob. gr. 2[169] and Guelferb. 75a Helmst (LDAB 2569).[170]

166 For the discussion of the graphic typologies found in manuscripts from Egypt, see the paragraph 4.4 of the *Coptic Biblical Majuscule* chapter in the present volume.

167 Cavallo 1967a, 93–98.

168 Cavallo 1967a, 94–97.

169 Cavallo 1977a, 106.

170 Crisci 1996, 78, 102, 107.

3.5.2.2 Syriac-Antiochene

The manuscripts Vindob. Theol. gr. 31 (LDAB 3078), Berat. 1 (LDAB 2901), Codex N of the Gospels (LDAB 2905),[171] Paris. Suppl. gr. 1286 (LDAB 2902), *Codex Purpureus Rossanensis* (LDAB 2990) have been attributed by Cavallo to the Syriac-Antiochene area on the basis of the sites where they were discovered, the textual characters of the *New Testament* texts they contain and the stylistic and iconographic features of the miniatures.[172] The scripts show a solemn monumentality in their forms and a mannered deployment of chiaroscuro. Ornamental thickenings are present in *delta* and *pi* but absent in *epsilon* and *sigma*; the stems descending below the base line end with an oblique leftward stroke. Seen from a codicological viewpoint—not taken into consideration by Cavallo but the importance of which was brought out by Crisci—these manuscripts are strikingly similar (Table 27). They all have a medium-large size, with a L/H ratio of the page between 0.810 and 0.870, a page layout which varies from one column to two columns per page but with a somewhat reduced number of lines, on average 16–17, because of the enlarged module used for the letters. Cavallo attributed the following manuscripts to this group: Vat. gr. 2061A (section B: ff. 234, 236, 238–239, 241, 243, 245 [LDAB 10657]; section C: ff. 254–292 [LDAB 10658]) and Vat. gr. 2302 (LDAB 10642);[173] but these attributions are not without difficulties. Section B of Vat. gr. 2061 and Vat. gr. 2302, in neither of which does the script have the artifice and monumentality of the others in this group, show palaeographical features which would suggest they do not belong to a Syriac-Antiochene ambience but rather, as a cautious hypothesis, already proposed by Crisci, to a Syrian-Palestinian one. Only Vat. gr. 2061A (section C) could be said to belong to the Syriac-Antiochene group of manuscripts, in that the writing shows the same monumentality, with a module for the letters measuring 1 cm in height. Furthermore, seen codicologically, it has a medium-large size (52 cm) with two columns to the page, each consisting of 16–17 lines.

Among new manuscripts Louvain fr. H. Omont 8 + Athon Lavra 61 (LDAB 2922) shows palaeographical features which are common to the majority of manuscripts in this group, though codicologically it seems to stand apart: it has a small to medium size (38.5 cm), two columns per page with about 12 lines. Similarly, Cantabr. Add. 1875 (LDAB 2960) shares palaeographical characteristics of the group, but has a small size of 22 cm and (2) columns per page each of about 23–24 lines.

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171 Athen. fr. 21 + Lerma, A. Spinola, s.n. + Lond. Cotton Tit. C. XV + New York, Pierp. Morg. Libr., 874 + Patm. 67 + Vat. gr. 2305 + Petropol. gr. 537 + Vindob. Theol. gr. 31 (ff. 25–26) + Tessalonic. Ms. 1.

172 Cavallo 1967a, 98–105.

173 Cavallo 1977b, 121–124.

3.5.2.3 Syrian-Mesopotamian

The manuscript Vat. Syr. 162 + Lond. Add. 14665 (Z^1 [LDAB 3474], Z^2 [LDAB 3342], Z^4 [LDAB 3340], Z^6 [LDAB 3341]) originates from the Syrian-Mesopotamian area. The *scriptio superior* contains a Syriac chronicle composed in the ninth–tenth centuries at Zuqnin in Mesopotamia by Joshua the Stylite. It is a plausible suggestion that the *scriptio inferior* in Biblical majuscule of sections Z^1–Z^6 was created in the region between Syria and Mesopotamia. Z^1 is written in a monumental Biblical majuscule which is certainly connected to the manuscripts of Syriac-Antiochene origin, as are sections Z^2 and Z^4. The Biblical majuscule found in Z^6 is less elaborated and shows some hesitancy and variability in aspects of the written trace.

3.5.2.4 Palestinian

A Palestinian origin has been proposed for the manuscripts Lond. Royal MS. 1 D V–VIII (LDAB 3481), Vat. gr. 1288 (LDAB 780), Vat. gr. 2061A (section A: ff. 198, 199, 221–222, 229–230, 293–303, 305–308 [LDAB 2906]), Vat. gr. 2306 (LDAB 3980). A firm point of reference is provided by Vat. gr. 1288, the celebrated Vatican Dion Cassius, for which a Palestinian origin (possibly Caesarea) has been proposed on linguistic and cultural historical grounds.[174] The other manuscripts in the group have some palaeographical affinities with the Dion Cassius, beginning with Lond. Royal MS. 1 D V–VIII (Codex Alexandrinus). But it should be said that, while the palaeographical features do not seem especially distinctive, codicologically speaking they are very closely related: all have medium-large and large dimensions, a three-column page layout, except for the Codex Alexandrinus which has two columns, and between forty-one and fifty-two lines per page. The identification of Caesarea in Palestine as the place of origin for the Codex Sinaiticus (second half of fourth century [LDAB 3478]) and the Codex Vaticanus (second half of fourth century [LDAB 3479]) was made on purely textual grounds by Skeat (1999), who believed the two famous codices to be 'the work of the same scriptorium, and [...] written at approximately the same time'[175] and suggested they were two copies from the fifty copies of the Bible requested in 330 CE from Eusebius of Caesarea by the Emperor Constantine.[176] Skeat's contribution takes no account of the regional characteristics of the script nor does he take much into consideration the palaeographical aspect of the ques-

174 Mazzucchi 1979, 103–108.

175 Skeat 1999, 603.

176 Skeat 1999, 604–617. An Alexandrian provenance is confirmed, on a purely textual basis, by Pierre-Maurice Bogaert and Stephen Pisano in *Vaticanus* 1999, 26, 40.

tion. The fact remains that in the middle of the fourth century there are no palaeographical features which are marked enough to suggest that there was a Palestinian ambience distinct in itself, though it is true that from the codicological point of view the two manuscripts seem to match later codices produced in this area: the Codex Sinaiticus is large in size and has four columns per page of forty-eight lines each; the Codex Vaticanus is medium-large in size and has three columns per page of forty/forty-four lines each.

3.5.2.5 Mesopotamian

For the manuscripts Wash. Freer 1 (LDAB 3288), Lond. Add. MS 17211 (ff. 1–48 [LDAB 2892]), P. Berol. 6794 (LDAB 2205), Lond. Add. MS 17210 (LDAB 2231), Paris. gr. 9 (LDAB 2930), Wash. Freer 4 (LDAB 3044) Cavallo has proposed an Egyptian-Nitrian origin on the following grounds: the sites where they were discovered, the textual types of sacred texts they contain, and their graphic-stylistic features.[177] The writing is unelaborated and uses simple and even somewhat crude forms. Some of these forms and pen-strokes are strikingly unusual: the first two strokes of *alpha* are written without lifting the pen while the third is slightly curved and protruding above; in *delta* and *lambda* the righthand line is slightly curved and protruding above; in *mu* the beginning of the oblique righthand stroke does not coincide with the top of the vertical line but slightly below; *upsilon* has the stroke descending from right to left slightly curved and gradually thinning. To these manuscripts Cavallo and Maehler have added another two: P. Berol. 16353 (LDAB 3225) and P. Berol. 13929 + P. Berol. 21105 (LDAB 367).[178]

Crisci has modified the overall picture.[179] He attributes Lond. Add. MS 17211 (ff. 1–48; the Codex Nitriensis) to Mesopotamia; Cavallo had assigned it to the Egyptian-Nitrian ambience as it came from Deir es-Suriani in the Nitrian desert but there is every probability that it was actually produced in Mesopotamia, since a note in Syriac tells us that the *scriptio superior* was carried out in the monastery of Mar Simeon in Kartamin.[180]

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177 Cavallo 1967a, 87–93. Some of these manuscripts had already been grouped together using palaeographical criteria by Sanders 1909, 130–132.

178 Cavallo / Maehler 1987, pl. 24 b–c.

179 Crisci 1996, 150–153.

180 A note on f. 53r states that the Syriac text was copied by Simeon, an anchorite at the convent of Mar Simeon in Kartamin, for Daniel, *periodeutes* of the district of Amid; in addition, two more notes in Syriac (f. 49r) record that the manuscript had been in the possession of Daniel, bishop of Edessa: Daniel had acquired it while *periodeutes* of Amid and bequeathed it to the

If we accept Crisci's hypothesis, then other manuscripts in this group are also likely to have been written in Mesopotamia: Lond. Add. MS 17210 (which, as far as the *scriptio superior* in Syriac is concerned forms one manuscript with Add. MS 17211),[181] P. Berol. 6794, Wash. Freer 1. Two manuscripts, Paris. gr. 9 and Wash. Freer 4 were included by Cavallo in the Egyptian-Nitrian group, but graphically they are not entirely similar to the preceding manuscripts, as Crisci observed: it is enough to look at the *upsilon* with the thread-like oblique stroke descending from right to left and a pronounced thickening at the end of the stroke, which is quite different from the *upsilon* found in the other manuscripts of the group, in which the same oblique stroke gradually thins. Among the new manuscripts P. Paris inv. E 6678 + P. Raineri II, pp. 78–79 (LDAB 4005) displays palaeographical features which are similar to P. Berol. 6794; for this reason it is possible to attribute a Mesopotamian provenance to it, rather than an Egyptian-Nitrian one. If Crisci's hypothesis is correct, Cavallo's 'Egyptian-Nitrian' ambience may in fact hardly exist as an autonomous class; it would be more correct to speak of a Mesopotamian ambience. As far as the codicological aspects of this group are concerned (Table 28), while there are striking variations, the medium-large size is most common. Page layout consists prevalently of a single column per page; Wash. Freer 1 is the exception, with two columns.

3.5.2.6 Egyptian

Cavallo assigns two manuscripts, without going into detail, to Egypt: Vat. gr. 2306 and Vat. gr. 2591 (ff. 25r–32v, 35r–38v).[182] Yet palaeographically Vat. gr. 2306 seems akin to Vat. gr. 1288, which has been attributed to a Palestinian ambience. Vat. gr. 2591 can be compared to manuscript PSI XVI 1612 (LDAB 7154), a parchment codex from Antinoopolis. For the manuscript P. Bodm. XXXVIII (LDAB 1106), Carlini has proposed an Egyptian provenance,[183] though the comparisons made by Cavallo with the Codex Sinaiticus and P. Beatty IV (LDAB 3160) do not resolve the question. The Egyptian ambience, as recon-

convent of Mar Silas of Sarug in Mesopotamia; see Wright 1871, 550, identifying Daniel with a bishop of Edessa between 768 and 825, and assuming that the codex had been probably brought to the convent of St Mary Deipara in the Nitrian Desert of Egypt by Moses of Nisibis in 932 CE, together with 250 other manuscripts; see also van Haelst 1976, 400. It is worth pointing out that the *scriptio inferior* on ff. 1r–48v of the manuscripts is in Biblical majuscule, whereas on ff. 49r–53v sloping pointed majuscule is used (LDAB 7468).

181 Wright 1871, 548–550.

182 Cavallo 1977b, 121–124.

183 Carlini 1987, 29.

structed by Cavallo, does not appear to have much importance as a centre of production.[184]

Cavallo identifies two smaller localities which form part of the larger Egyptian area: Egyptian-Nitrian (on which see the preceding section 3.5.2.5) and Egyptian-Alexandrian.

3.5.2.7 Egyptian-Alexandrian

Cavallo's attribution to an Egyptian-Alexandrian ambience of the manuscripts P. Ant. I 19 (LDAB 796), P. Ant. II 58 (LDAB 5827), P. Ant. II 65 (LDAB 5994), P. Oxy. VI 848 (LDAB 2799), P. Oxy. XIII 1595 (LDAB 3313), Lond. Cotton Otho B.VI (LDAB 3242), which come from Antinoopolis and Oxyrhynchus, is based on decorative and textual elements.[185] The writing is not excessively heavy; the oblique strokes descending from left to right are the thickest, except for *nu*, the oblique strokes descending from right to left are of medium thickness, rarely though still occasionally found after the end of the fifth century. Ornamental thickenings at the end of thin strokes are either absent or barely indicated. These palaeographical characteristics are not especially distinctive compared with other manuscripts in Biblical majuscule from the fifth to sixth centuries; as a result this localisation is the weakest of the geographical categories proposed by Cavallo in his 1967 study. Among the subsequently discovered material written in Biblical majuscule only two manuscripts, P. Hal. 55A (LDAB 5969) and P. Col. XI 293 (LDAB 2953) can be plausibly given an Egyptian-Alexandrian provenance.

3.5.2.8 Manuscripts from Sinai

A number of manuscripts coming from the monastery of St Catherine on Mount Sinai remain to be considered: Sin. NE ΜΓ 107 (LDAB 7329), Sin. NE ΜΓ 14, Sin. NE ΜΓ 70 (LDAB 7332), Sin. NE ΜΓ 87 (LDAB 7334), Sin. NE ΜΓ 76 (LDAB 10315), Sin. Politis 1b, Sin. NE ΜΓ 71 (LDAB 7331), Sin gr. 221 (ff. 147v–148r), Sin. gr. NE ΜΓ 12, Petropol. gr. 12 + Petropol. gr. 278 + Petropol. Dmitriesvskij s.n. + Sin. Harris Nr. 11 (LDAB 2989), Petropol. gr. 258A + Sin. Harris Nr. 14 (LDAB 3065). In palaeographical terms, these manuscripts do not constitute a distinct group. As Crisci has observed, they reflect on the contrary the stylistic variations in the canon found in the East. The manuscripts Sin. NE ΜΓ 107 and Sin. NE ΜΓ 71 can

184 For the production of manuscripts in Biblical Majuscule in Egypt, see paragraph 4.4 of the *Coptic Biblical Majuscule* chapter in this volume.

185 Cavallo 1967a, 85–87.

be compared with Guelferb. 75a Helmst (Constantinople), Sin. NE MΓ 70 with Vindob. Theol. gr. 31 (Syriac-Antiochene), the manuscripts Sin. NE MΓ 87, Sin. Politis 1b, Petropol. gr. 12 + Petropol. gr. 278 + Petropol. Dmitriesvskij s.n. + Sin. Harris Nr. 11 and Petropol. gr. 258A + Sin. Harris Nr. 14 can be compared with Vindob. Med. gr. 1 (Constantinople), the manuscripts Sin. NE MΓ 76 and Sin. gr. 221 (ff. 147v–148r) can be compared with Lond. Add. MS 17211 (Mesopotamia), the Sin. gr. NE MΓ 12 can be compared with Paris. gr. 9 and Wash. Freer 4 (attributed by Cavallo to the Egyptian-Nitrian ambience but not matching that group).

3.5.2.9 Western area

A large number of manuscripts have been attributed to the Western area of production: Laur. Conv. Soppr. 152 (ff. 106, 107, 110, 111, 113–122, 127–136, 153–176t Crypt. B.α.LVI n. I (a) (LDAB 10478), Crypt. Z.α.XXIV (b) (LDAB 3006), Mutin. gr. 73, Mon. lat. 29022e (LDAB 8952), Neapol. ex Vindob. gr. 1 (LDAB 802), Laud. gr. 35 (LDAB 2881), Paris. Coislin 186 (LDAB 3403), Paris. gr. 107 + 107A + 107B (LDAB 3003), Paris. Suppl. gr. 1155 (f. 19; LDAB 10067), Paris. Suppl. gr. 905 (ff. 54v, 51v, 112v), Patm. 171, Vallic. C 34/IV (LDAB 10478), Vat. Barb. gr. 472 (LDAB 10654), Vat. Barb. gr. 336 (LDAB 10359), Vat. gr. 1666 (LDAB 7153), Vat. gr. 1456 (ff. 179/184; LDAB 10656), Vindob. lat. 954 (ff. 7–9, 14–15; LDAB 8952), Vindob. Suppl. gr. 121 (LDAB 10660), Weissemb. gr. 64 (part I: ff. 194–201, 299, 302–304, 311, LDAB 2932; part II: ff. 90–97, 154–161, 178–185, 226–233, 242–244, 257–259, 272, 278–279, 298, 300–301, LDAB 2904). In this area of production distinctive palaeographical features were employed. The writing is fluent and frequently rather careless; decorative flourishes are not much accentuated at the end of thin strokes. The main characteristic is the influence of Latin uncial script in the formation of certain letters: the influence of the uncial script employed in Rome on Biblical majuscule can mainly be seen in the flattening of the curves of letters consisting of rounded forms (*epsilon*, *theta*, *omicron*, *sigma*, *omega*). Other characteristics are the horizontal stroke of *delta* generally extended to the right; the horizontal stroke of *pi* tends not to be extended beyond the vertical strokes of the letter; *upsilon* has a very short vertical stroke which either descends below the base-line very slightly or not at all; the vertical stroke of *rho* extends a long way below the base-line, so much so it touches the letters in the line beneath.

Turning to the codicological aspects of the group (Table 29), in terms of size, there is a notable variation. Three manuscripts are small, twelve small-medium, four medium-large. Eight manuscripts have a ratio between 0.651 and 0.700, four between 0.701 and 0.750, four between 0.751 and 0.800, two between 0.801

and 0.850, and one between 0.901 and 0.950. Nine manuscripts have a page layout consisting of one column per page, and nine have two columns. A single manuscript shows a variation of one, two and three columns. All the manuscripts have between 21 to 32 lines, apart from Patm. 171 which has 46.

This codicological data reveals the pronounced variations in the manuscripts produced in the West, in contrast to the uniformity of the palaeographical elements.

3.5.2.10 Conclusions on geographical areas of production

From the preceding analysis of the geographical areas of production of manuscripts written in Biblical majuscule an overall picture emerges which is somewhat unclear and shifting. Identifying the places of origin of such manuscripts and grouping them according to their palaeographical characteristics is an exercise which requires a great deal of caution, since the elements used for this are neither determining nor conclusive. Often scholars has resorted to criteria—such as the locality where the manuscript was found, the decoration or the textual tradition—which do not provide incontrovertible evidence for establishing the place of origin for a given manuscript.

For these reasons, the geographical areas proposed below must be considered as an attempt rather than a definitive listing.

The areas which seem to present largely homogeneous palaeographical elements, which are in most cases neither exclusive to nor definitive of a specific area, appear to be the following:

1. *Constantinople*: Lond. Add. MS 5111 (beginning of sixth century), Vindob. Med. gr. 1 (beginning of sixth century), Guelferb. 75a Helmst (second half of seventh century), Neapol. ex Vindob. gr. 2 (ninth to tenth century), Marc. gr. I 8 (ninth to tenth century).

2. *Syria-Antioch*: Berat. 1 (first half of sixth century), Vindob. Theol. gr. 31 (first half of sixth century), Cantabr. Add. 1875 (second half of sixth century), Lovanio fr. H. Omont 8 + Athos, Lavra Δ 61 (second half of sixth century), Codex N of the Gospels (second half of sixth century), Paris. Suppl. gr. 1286 (second half of sixth century), *Codex Purpureus Rossanensis* (second half of sixth century), Vat. gr. 2061A (section C) (end of sixth century).

3. *Mesopotamia*: P. Berol. 16353 (beginning of fifth century), P. Berol. 13929 + P. Berol. 21105 (end of fifth century), Lond. Add. MS 17211 (ff. 1–48; end of fifth century), Wash. Freer 1 (end of fifth century), P. Berol. 6794 (fifth to sixth century), Lond. Add. MS 17210 (fifth to sixth century), P. Paris inv. E 6678 + P. Raineri II, pp. 78–79 (fifth to sixth century), Wash. Freer 4 (sixth century), Paris. gr. 9 (first half of sixth century).

4. *Syria-Mesopotamia*: Vat. Syr. 162 + Lond. Add. 14665 (Z^1: first half of sixth century; Z^2: second half of sixth century; Z^4: first half of sixth century; Z^6: second half of sixth century).

5. *Palestine*: Vat. gr. 2061A (section A) (middle of fifth century), Vat. gr. 1288 (second half of fifth century), Lond. Royal MS 1 D V–VIII (second half of fifth century), Vat. gr. 2306 (beginning of sixth century).

6. *Syria-Palestine*: Vat. gr. 2302 (first half of sixth century), Vat. gr. 2061A (section B) (middle of sixth century).

7. *Western area*: Mon. lat. 29022e (middle of fifth century), Paris. gr. 107 + 107A + 107B (middle of fifth century), Weissemb. 64 (fifth to sixth century), Vindob. lat. 954 (beginning of sixth century), Laud. gr. 35 (end of sixth century), Neapol. ex Vindob. gr. 1 (seventh century), Paris. Coislin. 186 (seventh century), Paris. Suppl. gr. 1155 (f. 19) (eighth century), Paris. Suppl. gr. 905 (eighth century), Vat. Barb. gr. 472 (eighth century), Vat. Barb. gr. 336 (eighth century), Vindob. Suppl. gr. 121 (eighth century), Crypt. B.α.LVI n. I (a) (end of eighth century), Crypt. Z.α.XXIV (b) (end of eighth century), Patm. 171 (end of eighth century), Vallic. C 34/IV (end of eighth century), Vat. gr. 1666 (800 CE), Vat. gr. 1456 (eighth to ninth century), Laur. Conv. Soppr. 152 (end of ninth century), Mutin. gr. 73 (end of ninth century).

Before the fifth century there do not appear to have been particular graphic styles within Biblical majuscule. Only in the fifth century do various stylisations begin to emerge (which can be interpreted as regional differences), progressively reinforced over the course of the following centuries until the ninth and tenth centuries. The most documented area is Western Europe, both for the number of surviving manuscripts and in terms of chronological range (from the fifth to the close of the ninth century). The highest rate of production in Western area (ten manuscripts out of a total of twenty for the period) occurs during the eighth century.

3.6 Tables

Century	Century (unspecified)	First half	Mid	Second half	Total	%
2nd			1	20	21	7,78
2nd–3rd	12				12	4,44
3rd	4	17	4	7	32	11,85
3rd–4th	5				5	1,85
4th	7	4	4	25	40	14,81

Century	Century (unspecified)	First half	Mid	Second half	Total	%
4th–5th	7				7	2,59
5th	3	29	12	27	71	26,30
5th–6th	12				12	4,44
6th	3	26	2	10	41	15,18
6th–7th	2				2	0,74
7th	3	1		4	8	2,96
8th	5	1		4	10	3,70
8th–9th	4				4	1,48
9th				3	3	1,11
9th–10th	2				2	0,74
Tot.					270	

Tab. 6: The chronological distribution of the manuscripts in Biblical majuscule.[186]

Century	Century (unspecified)	First half	Mid	Second half	Total	%
2nd			1	19	20	29,41
2nd–3rd	12				12	17,65
3rd	3	14	3	4	24	35,29
3rd–4th	5				5	7,35
4th	2	1		3	6	8,82
5th		1			1	1,47
Tot.					68	

Tab. 7: Papyrus scrolls.

186 The total number of manuscripts in Biblical majuscule in the present Table is 270 and not 264 (as listed in Orsini 2005a, 215–259), because of the division of some composite manuscripts into their individual codicological units: Vat. gr. 2061A (Orsini 2005a, 152–154), Vat. Syr. 162 + Lond. Add. 14665 (Orsini 2005a, 158–162), Guelf. Weissemb. 64 (Orsini 2005a, 172 n. 30).

Century	Century (unspecified)	First half	Mid	Second half	Total	%
2nd				1	1	3,33
3rd		2	1	1	4	13,33
4th	1	2	1	6	10	33,33
4th–5th	2				2	6,67
5th	1	4	1	4	10	33,33
6th		2			2	6,67
6th–7th	1				1	3,33
Tot.					30	

Tab. 8: Papyrus codices.

Century	Century (unspecified)	First half	Mid	Second half	Total	%
3rd				1	1	0,61
4th	4	1	3	15	23	13,94
4th–5th	5				5	3,03
5th	2	23	11	23	59	35,76
5th–6th	12				12	7,27
6th	3	22	2	10	37	22,42
6th–7th	1				1	0,61
7th	3	1		4	8	4,85
8th	5	1		4	10	6,06
8th–9th	4				4	2,42
9th				3	3	1,82
9th–10th	2				2	1,21
Tot.					165	

Tab. 9: Parchment codices.

Manuscripts	Reconstructed Dimensions	Contents	Date
P. Vindob. G 29816a + P. Whithouse (LDAB 748)	[m 19/20,5× cm 24][187]	Demosthenes, *In Midiam* 33–43	2nd–3rd
P. Oxy. LVI 3850 (LDAB 664)	[m 12×cm 26,6][188]	Demosthenes, *In Midiam* 131–137	2nd
P. Oxy. LII 3663 (LDAB 2020)	[m 4×cm 25,7][189]	Homerus, *Iliad* 18.33–50, 55–58, 73, 98–123, 182–193, 206–227, 261–277, 293–308, 325–342, 355, 375–389, 392–408	2nd–3rd

Tab. 10: Typologies of papyrus scrolls.

Century	Small (up to 32 cm)	Medium-small (32,1–49 cm)	Medium-large (49,1–67 cm)
2nd	1		
3rd		3	
4th	1	5	1
4th–5th			
5th	1	4	
6th	1	1	
6th–7th		1	
Tot.	4	14	1
%	21,05	73,68	5,26

Tab. 11: Papyrus codices: Typologies of size in chronological order.

187 Reconstructed in Lenaerts 1967, 132: for a discussion, see Orsini 2005a, 130–131.

188 Johnson 2004, 225: estimated roll length [≥10,2 / ≥10,8] m.

189 Johnson 2004, 213: estimated roll height [25,6] cm; Johnson 2004, 218: estimated roll length [4,1] m.

Century	0,400–0,450	0,451–0,500	0,501–0,550	0,551–0,600	0,601–0,650	0,651–0,700	0,701–0,750	0,751–0,800	0,901–0,950
2nd								1	
3rd		1		1	1				
4th	1		2	1	1	1		1	
4th–5th									
5th				2	1				1
6th							1	1	
6th–7th				1					
Tot.	1	1	2	5	3	1	1	3	1
%	5,55	5,55	11,11	27,78	16,68	5,55	5,55	16,68	5,55

Tab. 12: Papyrus codices: Ratios W/H of page layouts in chronological order.

Century	0,400–0,450	0,451–0,500	0,501–0,550	0,601–0,650	0,701–0,750	0,751–0,800	0,901–0,950	1
2nd						1		
3rd			1					
4th	2		1	1	2	1		1
4th–5th								
5th		1					1	
6th						1		
6th–7th								
Tot.	2	1	2	1	2	3	1	1
%	15,38	7,69	15,38	7,69	15,38	23,08	7,69	7,69

Tab. 13: Papyrus codices: Ratios w/h of written spaces in chronological order.

Century	Small	Medium-Small	Medium-Large	Large
3rd				
4th	10	4	2	1
4th–5th	1	3	0	
5th	18	21	6	1
5th–6th	1	4	2	
6th	4	10	19	

Century	Small	Medium-Small	Medium-Large	Large
6th–7th	1			
7th		5	3	
8th	1	6	3	
8th–9th		3	1	
9th	1	1	1	
9th–10th	1	1		
Tot.	38	58	37	2
%	28,15	42,96	27,41	1,48

Tab. 14: Parchment codices: Typologies of size in chronological order.

Columns	2nd	3rd	4th	4th-5th	5th	6th	6th-7th	Tot.	%
1 col.		3	6	1	7	2	1	20	76,93
2 cols	1		2	1	2			6	23,07

Tab. 15: Number of columns per page in papyrus codices.

Columns	3rd	4th	4th–5th	5th	5th–6th	6th	6th–7th	7th	7th–8th	8th	8th–9th	9th	9th–10th	Tot.	%
1 col.		10	4	24	5	16	1	3		5	2	3	1	74	48,05
2 cols	1	8	1	25	6	20		4		4	2		1	72	46,75
3 cols		2		3		1		1						7	4,54
4 cols		1												1	0,65

Tab. 16: Number of columns per page in parchment codices.

Century	0,300–0,400	0,401–0,500	0,551–0,600	0,601–0,650	0,651–0,700	0,701–0,750	0,751–0,800	0,801–0,850	0,851–0,900	0,901–0,950	0,951–1	1,200–1,700
3rd												
4th						4	3	1	5	1	2	1
4th–5th								3		1		
5th	1	1	2	1	5	5	9	11	4	3	3	1
5th–6th					1	1	2	1	1		1	
6th				2	9	4	3	11	1	1	2	
6th–7th							1					
7th				1	2		4			1		
8th					3	4	2	1				
8th–9th					2	1	1					
9th				1	1							1
9th–10th							1		1			
Tot.	1	1	2	5	23	19	26	28	12	7	8	3
%	0,74	0,74	1,48	3,70	17,04	14,07	19,26	20,74	8,89	5,18	5,92	2,22

Tab. 17: Parchment codices: Ratios W/H of page layouts in chronological order.

Century	0,350–0,400	0,400–0,500	0,501–0,550	0,551–0,600	0,601–0,650	0,651–0,700	0,701–0,750	0,751–0,800	0,801–0,850	0,851–0,900	0,901–0,950	0,951–1	1,001–1,100	1,101–1,590
3rd														
4th								3	2		3	2	2	1
4th–5th								1	1	1	1			
5th		1		2	1	2	3		4	4	4	1	1	
5th–6th							1		1					
6th	1		1		1	2	2	2	3	2	2	2	1	1
6th–7th								1						
7th						1								1
8th					4	1								
8th–9th		1				1	1							
9th					1									
Tot.	1	2	1	2	7	7	7	7	11	7	10	5	4	3
%	1,35	2,70	1,35	2,70	9,46	9,46	9,46	9,46	14,86	9,46	13,51	6,76	5,40	4,05

Tab. 18: Parchment codices: Ratios w/h of written spaces in chronological order.

	Pap Cod	Parch-Cod	Parch-Cod (Pal)	Parch-Cod (Purp)	Single Pap leaf	Pap	PapScroll	Parch Scroll	Tot.	%
Secular literature	6	41	2			4	65		118	43,70
Religious literature	24	88	26	4	1	1	2	1	147	54,44
Unidentified texts		3	1				1		5	1,85
Tot.	30	132	29	4	1	5	68	1	270	

Tab. 19: Texts and Book Typologies.
PapCod = Papyrus Codex; ParchCod = Parchment Codex; Pal = Palimpsest; Purp = Purple Parchment; PapScroll = Papyrus Scroll; ParchScroll = Parchment Scroll

Century	Secular literature	Religious literature	Unidentified Texts	Tot.
2nd .	20			20
2nd–3rd	12			12
3rd	22	1	1	24
3rd–4th	5			5
4th	6			6
5th		1		1
Tot.	65	2	1	68
%	95,59	2,94	1,47	

Tab. 20: Text typologies—papyrus scrolls.

Century	Secular literature	Religious literature	Tot.
2nd		1	1
3rd	1	3	4
4th	3	7	10
4th–5th		2	2
5th	2	8	10

Century	Secular literature	Religious literature	Tot.
6th		2	2
6th–7th		1	1
Tot.	6	24	30
%	20	80	

Tab. 21: Text typologies—papyrus codices.

Century	Secular literature	Religious literature	Unidentified texts	Tot.
3rd		1		1
4th	13	10		23
4th–5th	4	1		5
5th	17	41	1	59
5th–6th	5	7		12
6th	3	33	1	37
6th–7th		1		1
7th	1	7		8
8th		10		10
8th–9th		3	1	4
9th		2	1	3
9th–10th		2		2
Tot.	43	118	4	165
%	26,06	71,51	2,42	

Tab. 22: Text typologies—parchment codices.

	2nd	2nd–3rd	3rd	3rd–4th	4th	5th	Tot.	%
Comedy		2	2				4	5,88
Philosophy			1	2			3	4,41
Mythology	1						1	1,47
Rhetoric	3	3	3	1	2		12	17,65
Bucolic Poetry	1						1	1,47
Epic Poetry	4	5	6		2		17	25
Iambic / Elegiac	2						2	2,94

	2nd	2nd–3rd	3rd	3rd–4th	4th	5th	Tot.	%
Poetry								
Lyric Poetry	3		2				5	7,35
Prose		1	2				3	4,41
Romances	1		1				2	2,941
History	3		5	1	2		11	16,18
Tragedy	1	1		1			3	4,41
Old Testament			1			1	2	2,94
Unidentified Texts	1		1				2	2,94

Tab. 23: Text typologies–papyrus scrolls.

	2nd	3rd	4th	4th–5th	5th	6th	6th–7th	Tot.	%
Manuals					1			1	3,33
Metric Poetry					1			1	3,33
Epic Poetry			2					2	6,67
History		1						1	3,33
Tragedy			1					1	3,33
Old Testament			2		4	1		7	23,33
New Testament	1	3	3	1	2	1	1	12	40
Patristic			2	1	1			4	13,33
Unidentified Texts					1			1	3,33

Tab. 24: Text typologies–papyrus codices.

	3rd	4th	4th–5th	5th	5th–6th	6th	6th–7th	7th	8th	8th–9th	9th	9th–10th	Tot.	%
Biography				1									1	0,61
Comedy		1	1	1									3	1,82
Philosophy				1		1							2	1,21
Grammar				1									1	0,61
Lexicography						1							1	0,61
Magic				1									1	0,61
Medicine				1		1		1					3	1,82
Rhetoric		7	1	5									13	7,88
Bucolic Poetry					1								1	0,61
Epic Poetry		2	2	3	2								9	5,45
Prose		1											1	0,61
History		1		2	2								5	3,03
Tragedy		1		1									2	1,21
Old Testament	1	2	1	19	3	13		1	1				41	24,85
OT+NT		2		1		1							4	2,42
New Testament		6		16	2	14	1	1	6	1		1	48	29,1
NT Apocryphal				1									1	0,61
NT Liturgy				1		2							3	1,81
Liturgical				2				3	1		2	1	9	5,45
Patristic						2		2	2	2			8	4,85
Unidentified Texts				2	2	2				1	1		8	4,85
Tot.	1	23	5	59	12	37	1	8	10	4	3	2	165	

Tab. 25: Text typologies–parchment codices.

Cavallo 1967a	Cavallo 1977a	Cavallo 1977b	Cavallo / Maehler 1987	Cavallo 1988	Crisci 1996
Constantinople (Vindob. Med. gr. 1; Lond. Add. MS 511)	Constantinople (Marc. gr. I.8; Neapol. ex Vindob. gr. 2; Vindob. Med. gr. 1)		Constantinople (Vindob. Med. gr. 1)		Constantinople (Vindob. Med. gr. 1; Guelferb. 75a Helmst)
Syriac-Antiochene Area (Vindob. Theol. gr. 31; Berat. 1; N of the Gospels; Paris. Suppl. gr. 1286; Codex *Purpureus Rossanensis*)		Syriac-Antiochene Area (Vat. gr. 2061A [B, C]; Vat. gr. 2302)	Syriac-Antiochene Area (Vindob. Theol. gr. 31; Codex *Purpureus Rossanensis*)		Syriac-Antiochene Area (Vindob. Theol. gr. 31; N of the Gospels; Berat. 1; Paris. Suppl. gr. 1286; Codex *Purpureus Rossanensis*; Vat. gr. 2061A [C])
					Mesopotamian Area (Lond. Add. MS 17211; PBerol. 6794; Lond. Add. MS 17210; P. Dura 2; P. Dura 7; P. Oxy. XXII 2334; Washin. Freer 1)
					Syriac-Mesopotamian Area (Vat. Syr. 162 + Lond. Add. 14665)
		Palestinian Area (Vat. gr. 2061A[A])	Palestinian Area (Lond. Royal MS. 1 D V-VIII; Vat. gr. 1288)		Palestinian Area (Vat. gr. 1288; Vat. gr. 2306)

Cavallo 1967a	Cavallo 1977a	Cavallo 1977b	Cavallo / Maehler 1987	Cavallo 1988	Crisci 1996
Egyptian-Nitrian Area (Wash. Freer 1; Lond. Add. MS 17211; P. Berol. 6794; Lond. Add. MS 17210; Paris. gr. 9; Wash. Freer 4)			Provincial Egyptian Area (P. Berol. 16353; P. Berol. 13929 + 21105; P. Berol. 6794)		Syriac-Palestinian Area (Vat. gr. 2061A [B]; Vat. gr. 2302)
Egyptian-Alexandrian Area (P. Ant. I 19; P. Ant. II 58; P. Ant. II 65; P. Oxy. VI 848; P. Oxy. XIII 1595; Lond. Cotton Otho B.VI)			Egyptian-Alexandrian Area (Lond. Cotton Otho B.VI)		
		Egyptian Area (Vat. gr. 2306; Vat. gr. 2591)			
					Sinaitic Area (Sin. МГ 76; Sin. Politis 1b; Sin. МГ 71; Petropol. gr. 12 + Petropol. gr. 278 + Petropol. Dmitrievskij s.n. + Sin. Harris Nr. 11, f. 2)

Cavallo 1967a	Cavallo 1977a	Cavallo 1977b	Cavallo / Maehler 1987	Cavallo 1988	Crisci 1996
[Western Area] (Paris. Coislin 186; Neapol. ex Vindob. gr. 1; Vat. gr. 1666)	Western Area (Paris. gr. 107 + 107A + 107B; Laud. gr. 35; Paris. Coislin. 186; Vat. Barb. gr. 336; Paris. Suppl. gr. 1155 (f. 19); Vat. gr. 1666; Mutin. gr. 73)	Western Area (Vindob. lat. 954; Mon. lat. 29022e; Weissemb. gr. 64; Paris. gr. 107 + 107 A + 107 B)	Western Area (Patm. 171; Vat. Barb. gr. 472; Vat. gr. 1666)	Western Area (Vat. gr. 1666; Patm. 171; Paris. Suppl. gr. 1155 (f. 19); Vat. Barb. gr. 472; Vindob. Suppl. gr. 121; Paris. Suppl. gr. 905; Vat. gr. 1456 (ff. 179/184); Laud. gr. 35; Paris. Coislin 186; Vat. Barb. gr. 336; Neapol. ex Vindob. gr. 1)	

Tab. 26: Geographical areas of production proposed for manuscripts in Biblical majuscule.

	Dimensions	Size (cm)	Ratio W/H	No. of Columns per page	No. Lines per page
N of the Gospels	28×33	61	0,848	2	16
Vindob. Theol. gr. 31	27×33,3	60,3	0,810	1	13/17
Berat. 1	27×31	58	0,870	2	17
Paris. Suppl. gr. 1286	25×30	55	0,833	1	15/16
Rossanensis	25×30	55	0,833	2	20

Tab. 27: Codicological features in manuscripts from the Syriac-Antiochene area.

	Dimensions	Size (cm)	Ratio W/H	No. Columns per page	No. Lines per page
Paris. gr. 9	27×33	60	0,818	1	40/46
Wash. Freer 1	25×30	55	0,833	2	31
Lond. Add. MS 17210	23,5x29,5	53	0,796	1	33
Lond. Add. MS 17211	23,5×29,5	53	0,796	1	25
P. Berol. 6794	[25,3×26]	51,3	0,973	1	33/34
Wash. Freer 4	[20×25]	45	0,800	1	30
P. Paris inv. E 6678 + P. Raineri II, pp. 78-79	[18,5×26,5]	45	0,698	1	[32/33]
P. Berol. 13929 + 21105	[17×20]	37	0,850	1	[30]
P. Berol. 16353	10,5×[18]	28,5	0,583	1	22

Tab. 28: Codicological features in manuscripts from Mesopotamian area.

	Dimensions	Size (cm)	Ratio W/H	No. Columns per page	No. Lines per page
Patm. 171	25,5×36,5	62	0,698	1	46
Vindob. Suppl. gr. 121	24,5×32,5	57	0,753	2	24
Neapol. ex. Vindob. gr. 1	26×28,7	54,7	0,905	2/3	21
Vat. gr. 1666	22×31	53	0,709	2	30/32
Laud. gr. 35	22×27	49	0,814	2	22/26
Vat. gr. 1456	19,2×29,1	48,3	0,659	2	26
Weissemb. gr. 64	21,5×26,5	48	0,811	2	24/28
Paris. Suppl. gr. 1155, f. 19	19,5×26,2	45,7	0,744	2	23
Paris. gr. 107 + 107A + 107B	19,5×24,5	44	0,795	1	21
Paris. Coislin 186	19×24	43	0,791	1	22/24
Vallic. C 34/IV	17,5×24,7	42,2	0,708	1	29/30
Vat. Barb. gr. 472	17,5×25	42,5	0,700	2	23/24
Crypt. B.α.LVI n.I (a)	[17/18×22,5/23,5]	41,5	0,765	2	[30]
Mut. gr. 73	15,9×24,7	40,6	0,643	1	21
Mon. lat. 29022e	16×23	39	0,695	2	31
Crypt. Z.α.XXIV (b)	16×22,2	38,2	0,720	1	24
Vat. Barb. gr. 336	13×18,9	31,9	0,687	1	21/23
Vindob. lat. 954	12,5×18,3	30,8	0,683	1	21/23
Laur. Conv. Soppr. 152	12,2×18	30,2	0,677	1	24/25
Paris. Suppl. gr. 905	-	-	-	-	-

Tab. 29: Codicological features in manuscripts from Western area.